

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

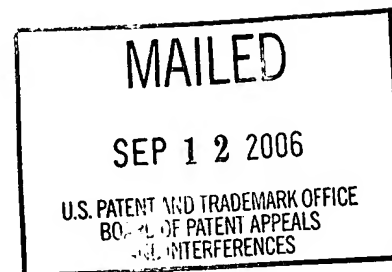
UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte DAVID NEFF

Appeal No. 2006-2390
Application No. 10/659,817

ON BRIEF



Before FRANKFORT, WARREN, and JEFFREY T. SMITH, Administrative Patent Judges.

JEFFREY T. SMITH, Administrative Patent Judge.

DECISION ON APPEAL

Appellant appeals the Examiner's final rejection of claims 1 to 5, 11 to 17 and 19, all of the pending claims. We have jurisdiction under 35 U.S.C. § 134.

Claims 1 to 5, 11 to 17 and 19 stand rejected under 35 U.S.C. § 103(a) as obvious over Stankiewicz.¹

Appellant's invention relates to an apparatus for filtering molten metal. The apparatus comprises a filter body having a beveled end. Representative claims 1, 4, and 13, as presented in the Brief, are reproduced below:

¹U.S. Patent 4,964,993 issued on October 23, 1990 to Stankiewicz.

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1. An apparatus for filtering molten metal before entering a dosing tube, the apparatus comprising a mounting portion; a filter body connected to the mounting portion, the filter body having a beveled end opposite the mounting portion; and a surface attached to and substantially covering the beveled end.

4. An apparatus for filtering molten metal held in a vessel before the metal enters a dosing tube, the apparatus comprising:

an attachment portion dimensioned to attach to a dosing tube; and

a closed filtering surface area attached to and extending from the attachment portion to provide a filtering surface, the closed filtering surface area comprises a cylindrical portion having a beveled end distal the attachment portion and a planar surface attached to the bevel end.

13. An apparatus for filtering molten metal, the apparatus comprising:

a vessel for holding molten metal;

a dosing tube disposed in the vessel; and

a filter attached to the dosing tube, wherein the filter includes a beveled end.

We have carefully reviewed the claims, specification, and applied prior art, including all the arguments advanced by both the Examiner and Appellant in support of their respective position. This review leads us to conclude that the rejection of claims 1 to 5, 11 to 17, and 19 is not well founded. Our reasons appear below.

Stankiewicz describes a multiple use porous ceramic filter for the filtration of molten metal. The porous ceramic molten

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metal filter is in the form of one or more porous ceramic closed-ended, cylindrical filter body elements (21) that rest upon the surface of the sealing plate (11). Stankiewicz discloses the molten metal flows through the ceramic material of the cylindrical elements and through the sealing plate element to be further flowed downstream. (Col. 3, ll. 12-35). According to the Examiner, Stankiewicz describes a filter apparatus that operates in substantially the same manner and achieves substantially the same results as the claimed invention. (Answer, p. 3). The Examiner relies on In re Dailey, 357 F.2d 669, 149 USPQ 47 (CCPA 1966) for the premise that motivation to alter the shape or configuration of an apparatus or component would have been obvious to one of ordinary skill in the art. (Answer, p. 3).

We agree with Appellant that the Examiner has not established a prima facie case of obviousness. Stankiewicz describes a porous ceramic molten metal filter that comprises two cylindrical bodies. Stankiewicz fails to disclose a filter body having a beveled end opposite the mounting portion as required by the independent claims. The Examiner states "Stankiewicz includes beveled ended connection (49) for the bottom portion of the sealing means, inclusion of such beveling also on the upper portion of the cylinder (29), which would also meet the requirement of a 'beveled end' on the filter body portion, for the purposes of connecting plate (31) to the top of the cylinder would also not cause any height reduction of the cylinder" (Answer, p. 5). The Examiner has not provided adequate motivation for modifying the filter body elements of

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Stankiewicz to include a beveled end. It is noted that the beveled ended connection (49) is a part of the sealing plate used to attach the porous ceramic filter cylinders to the holding furnace. Thus, the beveled edge (49) is present for the purpose of mounting. Including a beveled edge in the cylinder 29 would not provide such a function.

Stankiewicz discloses the molten metal flows through the porous ceramic filter material through the sealing plate to be further flowed downstream ultimately to casting molds. (Col. 3, ll. 31-35). Stankiewicz relies on gravity for the flow of the molten metal (col. 4, ll. 6-9). According to Appellants (specification, p. 3) a dosing tube is also known in the art as a suction tube. The presently claimed invention describes filter elements that are attached to this dosing tube (suction) for moving the molten metal through the filter body. Thus, the filtering apparatus of Stankiewicz and the present claims are not substantially the same. The Examiner has not provided adequate motivation to suggest modifying the Stankiewicz filter apparatus to meet the apparatus described by independent claims 1, 4, and 13.

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